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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/919,780	07/31/2001	Victor B. Kley	020921-001611US	4836

20350 7590 11/06/2002

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EXAMINER

KALIVODA, CHRISTOPHER M

ART UNIT PAPER NUMBER

2881

DATE MAILED: 11/06/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/919,780

Applicant(s)

KLEY, VICTOR B.

Examiner

Christopher M. Kalivoda

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) 1-4 and 31-34 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5-30 is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-34 are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 July 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: .

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DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of the Group II claims, claims 5-30, in Paper No. 8 is acknowledged.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: There are no references to reference signs 188, 458, and 461 in figure 11.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: The specification mentions control circuit 187 as shown in figure 43 on page 22, line 9 but there is no reference sign labeled 187. The specification mentions an obdurate plate 146 in figure 21 - 23 (see page 45, line 9) but the plate is referenced using reference number 240. The specification mentions obdurate plates on the sidewall 252 (see page 48, line 6) but is not shown in figure 25. The specification mentions measurement control circuit 265 (see page 50, line 9) but is not shown in figure 26. The specification mentions outlet ducts 494 (see page 83, line 28) but is not shown in figure 54. A proposed drawing correction or corrected drawings are required

in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The following title is suggested: "Scanning Probe Microscopy Inspection and/or Modification System".

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

35 U.S.C. 112, first paragraph, requires the specification to be written in "full, clear, concise, and exact terms." The specification is replete with terms which are not clear, concise and exact. The specification should be revised carefully in order to comply with 35 U.S.C. 112, first paragraph. Examples of some unclear, inexact or verbose terms used in the specification are:

- a. The specification refers to figure 10 on page 26, line 10 when it should refer to figure 11. ✓
- ✓ b. The specification is missing an intended reference on page 47, line 21.
- ✓ c. The specification is missing an intended reference on page 85, line 27.

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d. The drawings do not appear to match the description in the specification.

The text on page 56, lines 12-15 and lines 24-28 as well as page 57, lines 6-10 support figure 27.

The application needs to be reviewed to clean up several minor deficiencies including those indicated above. In addition, the drawings should be reviewed and only contain reference numbers cited in the specification.

Information Disclosure Statement

The information disclosure statement filed June 25, 2002 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered. Specifically, the following cited numbers on PTO/SB/08A (10-01) form are missing: 3-17, 21-25, 28-29, and 32 and were not considered unless referenced in PTO Form 892 or initialed on PTO/SB/08A (10-01).

Allowable Subject Matter

The following is a statement of reasons for the indication of allowable subject matter: The applicant filed an application (application number 09/919,780) entitled

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"Object Inspection and/or Modification System and Method" July 31, 2001. The case was ultimately restricted and applicant elected to prosecute claims 5-30 per letter dated July 31, 2001.

A review of continuing data showed no double patenting issues for the elected claims. In addition, a review of prior art failed to disclose or make obvious any scanning probe microscopy system or method whereby the probe tool is mounted in an aperture and simultaneously includes a means to restrict gas flow. The gas flow restriction means places the aperture in fluid communication with a vacuum source to create a microvacuum chamber in the gap region surrounding the aperture and between the probe surface and work surface (claim 5). Claims 6 – 24 would be allowed because they depend upon claim 5 or upon claims that ultimately depend on claim 5.

Furthermore, a review of prior art failed to disclose or make obvious any scanning probe microscopy system or method that uses a particle beam tool having the emitter mounted in an aperture of the probe base with the electrodes configured in the order described and simultaneously includes a means to restrict gas flow as described above (claim 25). Claims 26-30 would be allowed because they depend upon claim 25 or upon claims that ultimately depend on claim 25.

This application is in condition for allowance except for the following formal matters: The defective drawings, specification, and missing documents from the IDS.

Prosecution on the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11,453 O.G. 213. A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

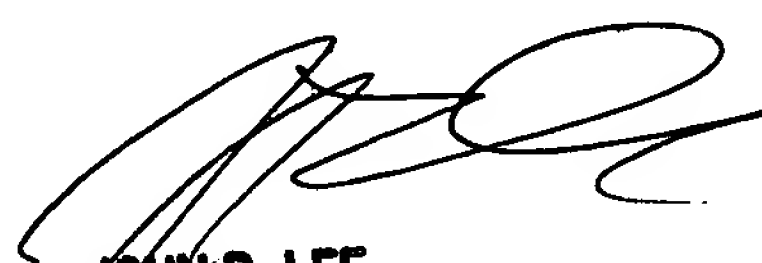
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher M. Kalivoda whose telephone number is (703)-305-7443. The examiner can normally be reached on Monday - Friday (8:30 - 5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Lee can be reached on (703)-308-4116. The fax phone numbers for the organization where this application or proceeding is assigned are (703)-872-9318 for regular communications and (703)-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-308-0956.

cmk
November 4, 2002


JOHN R. LEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800